

Customer No.: 31561
Docket No.: 14150-US-PA
Application No.: 10/711,864

REMARKS

Present Status of the Application

Claims 1-14 are rejected. Specifically, claims 1-3, 5-11, and 13-14 are rejected under 35 U.S.C. 102(b) as been anticipated by Nakashima et al (U. S. 2003/0160921; hereinafter Nakashima). In addition, claims 4 and 12 are rejected under 35 U.S.C. 103(a) as been unpatentable over Nakashima in view of Chau et al. (U. S. 2005/0158902; hereinafter Chua). Applicant has amended independent claims 1 and 7. After entry of amendments, claims 1-14 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections

Claims 1-3, 5-11, and 13-14 are rejected under 35 U.S.C. 102(b) as been anticipated by Nakashima. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as been unpatentable over Nakashima in view of Chua. Applicant respectfully traverses the rejections for at least the reasons set forth below.

1. The present invention uses the RTA process under the specific operation condition, as recited in amended claim 1 and 7, to transform the amorphous ITO into poly-crystal ITO. As a result, the present invention uses a single RTA process to obtain the poly-crystal ITO in high quality for reducing the fabrication time. In addition, since the RTA process does not lasts for a long time, the present invention can reduce the possibility in damaging the other device, as discussed in [Para 7], [Para 11], [Para 34]. The present invention indeed renders the

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unexpected results.

Dependent claims 4 and 12 further define the operation conditions for the single-stage RTA.

2. In re Nakashima [0048], Nakashima only discloses the thermal process at 200 degrees. However, Nakashima is nothing more than the discussions in [Para 7], about conventional issue to be solved by the present invention. Nakashima failed to propose the RTA process, which is different from the usual thermal process.

3. In re Chau [0059], the two-stage RTA process is proposed. The lower temperature at 300 degrees is used to crystallize the amorphous ITO, and the higher temperature 600 degrees is used to induce ohmic contact.

Clearly, Chau uses two-stage RTA to obtain ITO layer. Chau does not provide the features missing in Nakashima.

4. Further with respect to claim 4 and 12, the present invention uses the single-stage RTA to transform the amorphous ITO into the poly-crystal ITO, at the temperature greater than 300 degrees. Chau does not provide the features, recited in claims 4 and 12, missing in Nakashima.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1 and 7 patently define over the prior art references, and should be allowed. For at least the same

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reasons, dependent claims 2-6 and 8-14 patently define over the prior art references as well.

Claims 4 and 12 further distinguish over the prior art references.

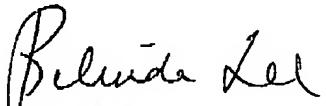
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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-14 of the invention patentably define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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